

Total No. of Printed Pages:02

**SUBJECT CODE NO:- 2052**  
**FACULTY OF SCIENCE AND TECHNOLOGY**  
**B.Sc. F.Y (Sem. II)**  
**Examination March/April-2022 (To Be Held In June/July-2022)**  
**Botany Paper-IV**  
**Diversity of Cryptogams – II**

[Time: 1.53 Hours]

[Max. Marks:50]

Please check whether you have got the right question paper.

- N.B
1. Attempt all questions.
  2. Illustrate your answer with suitable labeled diagrams.
- Q.1 Describe the general characters of Bryophytes and give its economic importance. 20  
 OR  
 Describe external & internal structure of Funaria sporophyte. 20
- Q.2 Describe occurrence, external and internal structure of sporophyte of selaginella. 20  
 OR  
 Write short notes on (any four) 20
- a) Gemma CUP
  - b) Heterospory
  - c) Vegetative reproduction in Funaria
  - d) Sporangium of equisetum
  - e) Development of synangium
  - f) Ligule
- Q.3 Multiple choice questions. 10
1. Who among the following is regarded as father of Indian Bryology \_\_\_\_\_.  
    - a) Prof. K.C. Merta
    - b) Prof. D. D Pant
    - c) Prof. S. R. Kashyap
    - d) Prof. Mehra P. N.
  2. Which of the following known as true moss \_\_\_\_\_.  
    - a) Club moss
    - b) Reindeer moss
    - c) Bog moss
    - d) Irish moss
  3. Protonema is the stage in the life cycle of \_\_\_\_\_.  
    - a) Funaria
    - b) Marchantia
    - c) Riccia
    - d) None of the above
  4. Marchantia plant shows CUP like structure on midrib of the branch called as \_\_\_\_\_.  
    - a) Ostiale
    - b) Gemma CUP
    - c) Seta
    - d) Receptacle

5. This pteridophytic plant commonly known as ‘horse tail’. \_\_\_\_\_.
- |                |               |
|----------------|---------------|
| a) Selagenella | b) Mausilea   |
| c) Equisetum   | d) Lycopodium |
6. Strobilus of club mosses consist \_\_\_\_\_.
- |                |                      |
|----------------|----------------------|
| a) Chlorophyll | b) Xanthophyll       |
| c) Sporophyll  | d) None of the above |
7. Megaspore shows small dark coloured papillae at its apex in the pteridophytic plant \_\_\_\_\_.
- |              |               |
|--------------|---------------|
| a) Equisetum | b) Lycopodium |
| c) Psilotum  | d) Mausilea   |
8. In the psilotum plant state is \_\_\_\_\_.
- |                |                 |
|----------------|-----------------|
| a) Protostele  | b) Siphonostele |
| c) Plectostele | d) Mixed stele  |
9. In between stem and leaf small membranous outgrowth is called ligule, it is present in \_\_\_\_\_.
- |                |              |
|----------------|--------------|
| a) Selaginella | b) Marsilea  |
| c) Lycopodium  | d) Equisetum |
10. Pteridophyte differ from Bryophytes in possessing \_\_\_\_\_.
- |                            |                             |
|----------------------------|-----------------------------|
| a) Independent gametophyte | b) Developing wall          |
| c) Vascular system         | d) Flagellate spermatozoids |